

containing an infrared-transparent pigment such as General Electric 61076.

The inner lip 50 of the second bezel 40 is preferably obliquely extending rearwardly (i.e. toward the left as viewed in FIGS. 6 and 7) and inwardly, terminating with an edge 64 describing a generally rectangular opening 66 which conforms to the contour of the CRT face 12, for engaging the CRT face 12 when the second bezel 40 is retained by the first bezel 22 in accordance of the present invention.

The dimensions of the outer bezel 40 are such that its outer sides 42, 44, 46, 48 fit within the opening 23 of the first bezel 22 with only a small space (perhaps 0.02 inch) between the second bezel outer sides 42, 44, 46, 48 and the respective inner edges 38, 36, 32, 34 of the first bezel 22. A flange 68 outwardly extends from the rear of the second bezel 40 (i.e. the rear being toward the right as viewed in FIG. 4), along the base of each of the second bezel outer sides 42, 44, 46, 48. The width of each flange 68 is such that the overall height and width dimensions of the second bezel 40 are greater than the opening 23 of the first bezel 22, so that the second bezel flanges 68 extend behind the first bezel 22 when the second bezel 40 is inserted within the opening 23 of the first bezel 22 as shown in FIG. 7.

Each of the outer sides 42, 44, 46, 48 of the second bezel 40 carry at least one and preferably two spring devices, which in their preferred embodiment are resilient cantilever members or spring fingers 70 obliquely projecting from the flanges 68 along each side 42, 44, 46, 48 and toward the front of the second bezel 40 (i.e. toward the left as viewed in FIG. 4). The spring fingers 70 are preferably integral with the second bezel 40, being molded into the flanges 68, and are preferably situated near the respective ends of each of the sides 42, 44, 46, 48. The length and forward projection of each of the spring fingers 70 are sufficient such that the spring fingers 70 resiliently engage the rear surface 72 of the first bezel 22 (which may include a member affixed to the rear surface 72) when, as shown in FIGS. 6 and 7, the second bezel 40 is fitted within the opening 23 of the first bezel 22 and the first bezel 22 is mounted in fixed relation to the CRT 10 with the second bezel's inner lip edge 64 engaging the CRT face 12.

In practicing the method of assembling the bezel apparatus of the present invention to the CRT face 12, the infrared emitter and detector pairs 56, 58 and their associated circuits are mounted within the cavity 54 of the second bezel 40, if the apparatus is for utilization in a touch input display system for providing an infrared radiation grid in front of the CRT face 12. The second bezel 40 is then fitted within the opening 23 of the first bezel 22 with the spring fingers 70 directed for resiliently engaging the rear surface 72 of the first bezel 22. The first or outer bezel 22 is next mounted to the chassis upon which has been mounted the CRT 10, with the second bezel's inner lip edge 64 engaging the CRT face 12. As the first or outer bezel 22 is secured to the chassis by the screws 28 (see FIGS. 6 and 7) the rearward displacement of the outer bezel 22 with its rear surface 72 engaging the spring fingers 70 rearwardly urges the inner bezel 40 for causing its inner lip edge 64 to engage the CRT face 12. The consequent resilient deflection of the spring fingers 70 effectively causes the inner bezel 40 to float with respect to the outer bezel 22 and to be self positioning in predetermined relation with respect to the CRT face 12. In such manner, manufacturing variations between the mounting points (e.g. the mount-

ing ears 14) of the CRT 10 and the CRT face 12 are accommodated. In addition, the continuing biasing force exerted by the spring fingers 70 when contacting the outer bezel 22 causes the inner lip edge 64 of the inner bezel 40 to be closely maintained against the CRT face 12, assisting in precluding dust and other ambient contaminants from entering the cavity 54 and from reaching the infrared emitters 56 and detectors 58 and their associated circuits.

Thus there has been described a bezel arrangement for an infrared radiation touch input display system, along with the method for assembling the bezel apparatus to the system's display screen, wherein the bezel assembly is mounted in predetermined fixed relation to the display housing and is self adjusting upon the display screen for accommodating manufacturing variations and inaccuracies in the position of the display screen with respect to the mounting points of the display device. Although the preferred embodiment has been described with respect to its utilization in a touch input system, the invention may be utilized in other display systems which are not of the touch input type, in which case the arrangement of radiation emitter and detector pairs are not contained by the inner bezel. Other embodiments of the present invention and modifications of the embodiment and method herein presented may be developed without departing from the essential characteristics thereof. Accordingly, the invention should be limited only by the scope of the claims listed below.

I claim:

1. Bezel apparatus for a display device having a display screen, comprising in combination:

a first bezel for the display screen, said first bezel having inner edges describing an opening in said first bezel;

mounting means for mounting said first bezel in fixed relation to the display device;

a second bezel for being fitted within said first bezel opening, said second bezel having an inner lip with an edge describing an opening in said second bezel, said inner lip edge conforming to the contour of the display screen for engaging the display screen; and spring means for cooperating with said first and second bezels for resiliently retaining said second bezel within said first bezel with said second bezel's inner lip edge engaging the display screen when said first bezel is mounted in fixed relation to the display device with said second bezel fitted within said first bezel opening.

2. The apparatus according to claim 1, above, wherein said second bezel floats with respect to said first bezel for engaging the display screen when said first bezel is mounted in said fixed relation to the display device with said second bezel fitted within said first bezel opening.

3. The apparatus according to claim 1, above, wherein:

said first bezel opening is generally rectangular and, when said first bezel is mounted in said fixed relation to the display device, said edges describing said first bezel opening border the display screen; and

said second bezel is generally rectangular and, when said first bezel is mounted in said fixed relation to the display device with said second bezel fitted within said first bezel opening, said spring means